Course Organization

CPSC 217: Introduction to Computer Science for Multidisciplinary Studies I July 2025

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July 1, 2025

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Welcome!

Jonathan Hudson, Assistant Professor (Teaching)

Lectures: MoWeFr 09:00-12:00 MS 217

Office: ICT 712

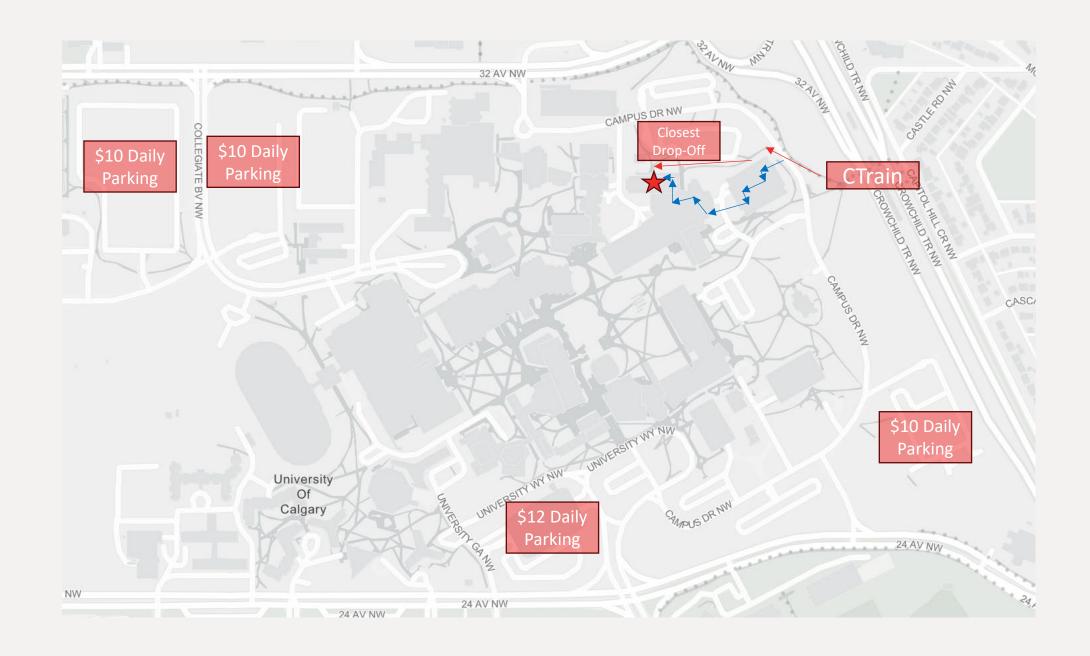
Office hours: 12:00-12:50 PM Mo/We/Fr

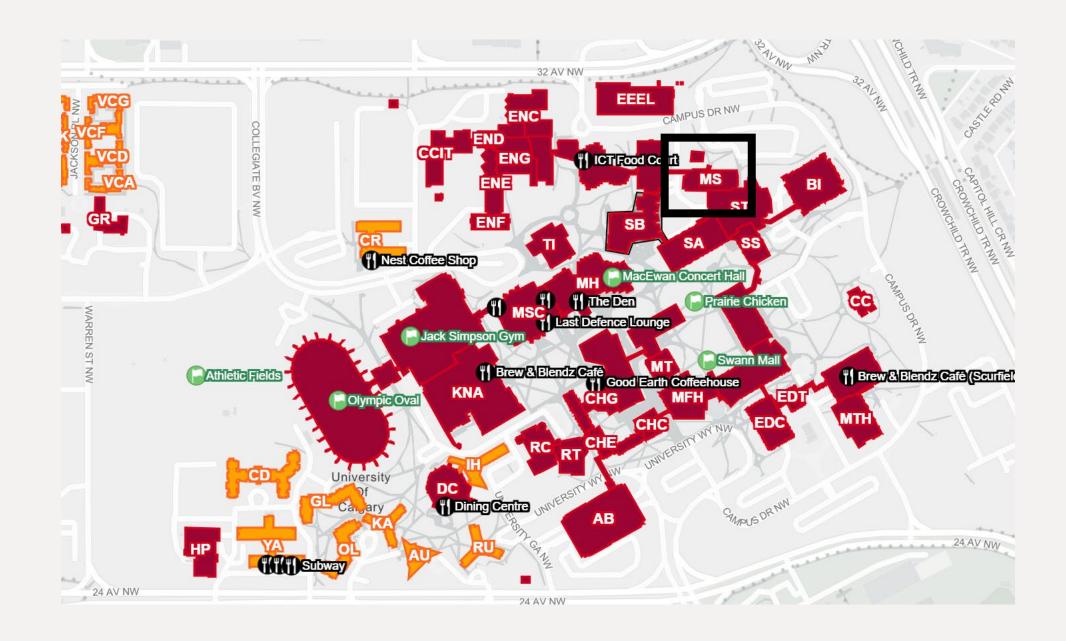
jwhudson@ucalgary.ca

https://cspages.ucalgary.ca/~jwhudson/CPSC217S25/

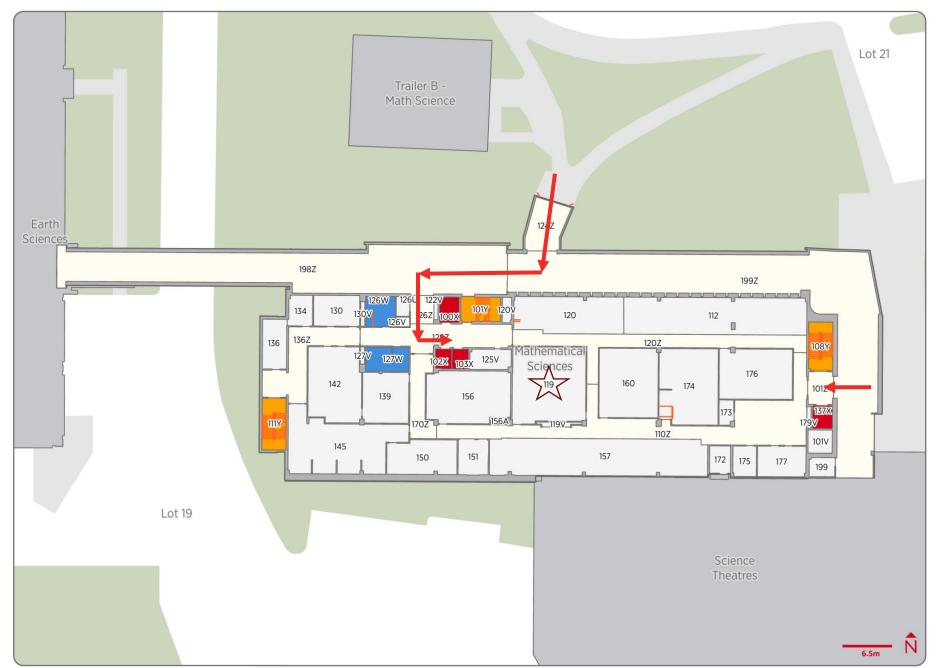




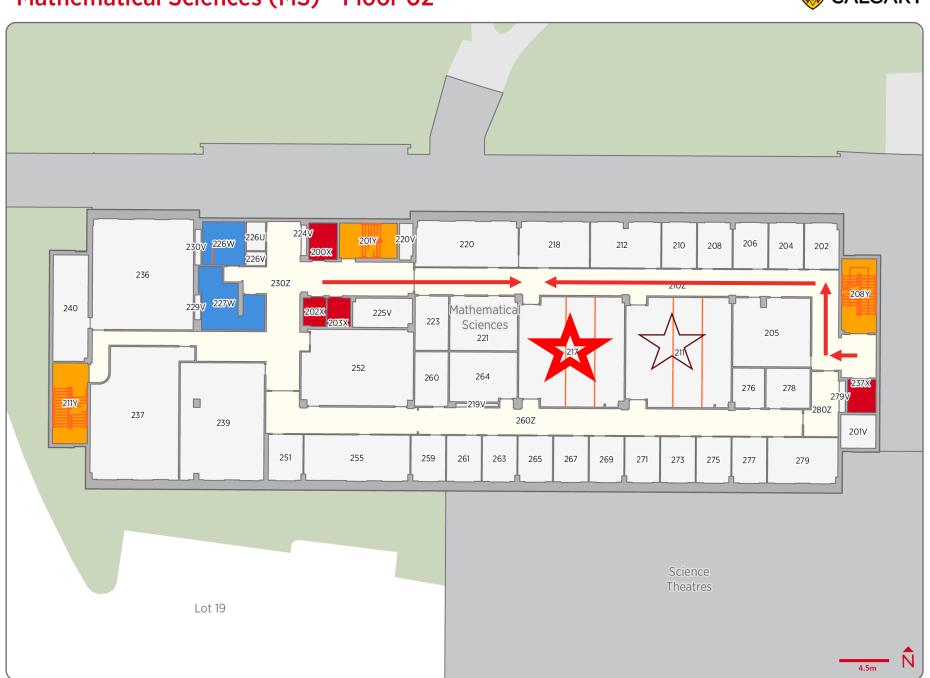












Tutorials

Tue/Thur 09-00-12:00

MS 119

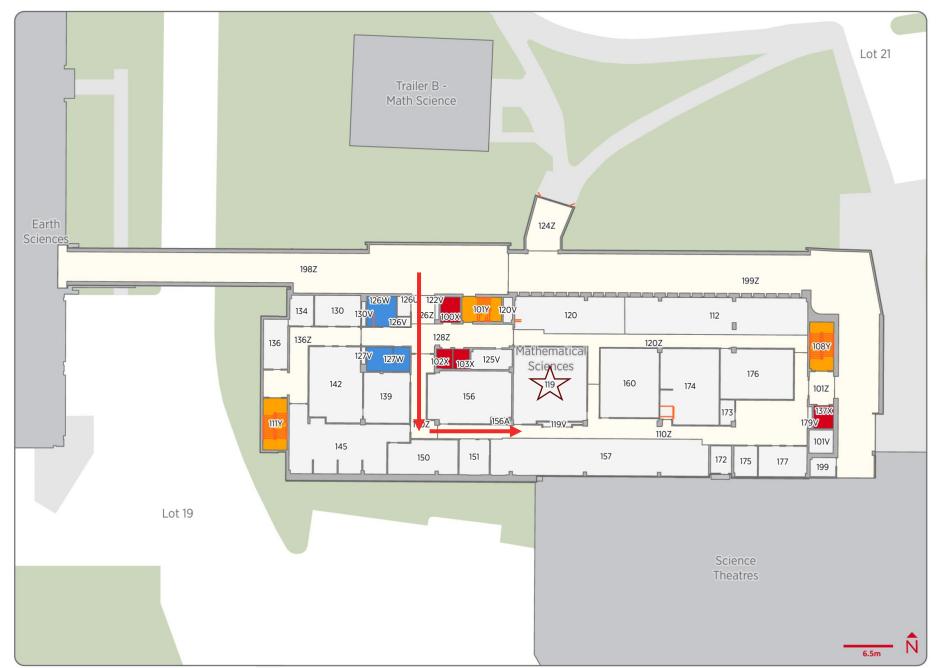
Liam Goheen - CBE

Math/Science Teacher

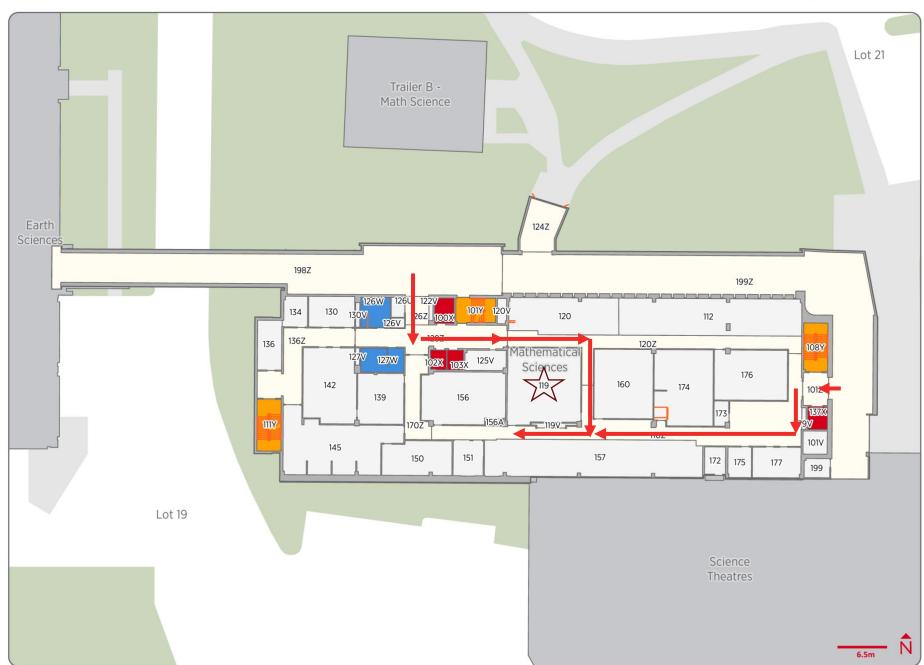
lkgoheen@cbe.ab.ca











Why Computer Science?

- All sciences are impacted by computer science
- Opportunities for multidisciplinary study, work, and research
- Exciting innovations and discoveries that change our lives
- Fascinating subject with fun experiences and an extraordinary potential
- You will learn cool ways to solve problems
- You can enjoy being extremely creative



Course Goal

From the calendar:

 "Introduction to problem solving, the analysis and design of small-scale computational systems, and implementation using a procedural programming language."

Goals:

- Design solutions to solve small scale and realistic problems
- Write programs based on a given design
- Debug and test programs
- Analyze your solution and the quality of your programs



Lectures

We will learn fundamentals of programming using Python We will cover:

- Variables
- Arithmetic operations
- Conditions and Loops
- Functions
- Strings, Lists, ,Tuples, Sets, Dictionaries
- Files, Exceptions, Command Line Arguments
- Recursion



Why Python 3?

- Python is a widely used high-level programming language for general-purpose programming
- Design philosophy emphasizes code readability
 - Whitespace indentation
 - Code blocks
- Efficient syntax
 - Allows programmers to express concepts in fewer lines of code



Technology?

- Coding is a new skill!!!
- Pen and Paper Studies have shown that the process of taking notes on a lecture by hand help improve recall of the material over taking notes electronically.
- Working many of the problems we will experience in this course by hand will also help change your mental process and prepare you better for the exams



Assignments

- Four individual assignment (30%) consists of programming questions
- Each assignment is due at 11:59 pm on the Tuesday due date.

Assignments	Due at 23:59
Assignment 1	July 8
Midterm (in-class)	July 14
Assignment 2	July 15
Assignment 3	July 22
Assignment 4	July 29
Final (in-class)	July 30



Grading

Component	Weighting %
Assignments (4)	6%,8%,8%,8%
Midterm	30%
Final	40%

- Each of the above components will be given a letter grade using the official University grading system. The final grade will be calculated using the grade point equivalents weighted by the percentages given above and then converted to a final letter grade using the official University grade point equivalents. (A+ are 4.3 for in-class component weighting)
- Must obtain a C- or better average on the exams to receive a C- or better in the course

